

REMARKS

This communication is a full and timely response to the final Office Action dated August 6, 2010. Claims 16-18 and 20-25 are pending. By this communication, no claims are amended. Claim 19 was previously cancelled. Favorable reconsideration of this application in view of the following remarks is respectfully requested.

Preliminary Matters

The Applicants note that the Examiner has included claim 19 in the rejection of the claims (discussed below), however, claim 19 was cancelled in the Applicants' previous response dated May 18, 2010. As such, any rejection directed to claim 19 is moot.

The Applicants further note that in both the non-final Office Action dated December 18, 2009 and the final Office Action, the Examiner alleges (see page 3 of both Office Actions) that Takashi teaches "A permission step of permitting writing of said one firmware into a predetermined memory." However, the Examiner then concedes that Takashi fails to teach the permission step and does not rely on any other reference for teaching this element. The Applicants can, therefore, only assume that the Examiner is relying upon Takashi for teaching the permission step, and his concession with regards to Takashi failing to teach this element was an inadvertent error. Nonetheless, the Applicants respectfully request clarification in the next office action if the rejection is not withdrawn.

Claim Rejections

Claims 16-18 stand rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter.

Claims 16-24 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Takashi* (JP 2000-29648) in view of *Yasushi* (JP 11-220609) and *Albanese* (U.S. Patent No. 5,617,541).

Claim 25 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Takashi*, *Yasushi*, and *Albanese* and further in view of *Felouzis* (U.S. Patent No. 5,943,673).

Claim Rejections under 35 U.S.C. §101

Claims 16-18 are rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter. The Examiner alleges that "It can be reasonably interpreted that the computer-readable medium would include embodiments including propagation media, such as carrier waves...." The Applicants disagree and respectfully submit that claims 16-18 recite patentable subject matter under 35 U.S.C. § 101.

Claim 16 recites that the computer-readable medium has a data communication program stored thereon that causes a computer to execute the recited steps. By reciting the computer program as being stored/recorded (encoded) on a computer-readable medium and executed by a computer, the structural and functional interrelationships between the computer program, the computer-readable medium and the computer permit the functionality of the computer program to be realized (see MPEP 2106.01(I), second paragraph). Therefore, claim 16 recites patentable subject matter under 35 U.S.C. § 101.

The computer-readable medium, as defined in independent claim 16, has the computer program stored thereon. As such, the computer-readable medium of claim 16 cannot be interpreted as a signal or carrier wave, as alleged by the Examiner, since signals or carrier waves do not store computer programs. By reciting that the computer-readable

medium stores a program, claims 16-18 are necessarily defining structure that is non-transitory.

Accordingly, for at least the foregoing reasons, the Applicants respectfully submit that independent claims 16, as well as claims 17 and 18, which depend therefrom, recite patentable subject matter under 35 U.S.C. § 101. Therefore, the Applicants respectfully request that the rejection of claims 16-18 under 35 U.S.C. § 101 be withdrawn.

Claim Rejections under 35 U.S.C. §103

Claims 16-24 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Takashi* (JP 2000-29648) in view of *Yasushi* (JP 11-220609) and *Albanese* (U.S. Patent No. 5,617,541). The Applicants respectfully traverse this rejection.

Takashi discloses a system and method for updating the firmware or function setting of a printer remotely using email messages. The system includes an email processing section configured to change the received data into an execution program. The execution program is then run to update the printer firmware.

Takashi does not disclose or suggest acquiring information relating to a priority level of attached firmware and determining whether the attached firmware attains a write allowable state into a predetermined memory based on acquired information relating to a priority level. *Takashi* is entirely silent with respect to firmware having a memory write priority level. The Examiner concedes to all of the above-noted deficiencies of *Takashi*. Moreover, the reference fails to disclose or suggest permitting writing of firmware into a predetermined memory when it is determined the firmware attached attains a write allowable state by said determination step.

In making the rejection of claim 16, the Examiner alleges that *Takashi* teaches "a permission step of permitting writing of said one firmware into a predetermined memory" and relies upon paragraph 16 for support. See p. 3 of the Office Action. The Office Action provides that, in the reference, *Takashi* teaches changing received data into program execution form (writing). Although this may be true, claim 16 specifically recites, "permission step of permitting writing of said one firmware into a predetermined memory when it is determined the firmware attached attains a write allowable state by said determination step." The Applicants respectfully submit that the Examiner is neglecting to consider each element of the claim in its entirety. As noted above, *Takashi* fails to disclose or remotely suggest the determination step (as acknowledged by the Examiner) upon which the permission step is based. As such, *Takashi* does not and cannot teach the permission step as recited in claim 16 (and as alleged by the Examiner) since the permission step as claimed depends upon a result of a step that *Takashi* fails to disclose. *Takashi*, therefore, fails to disclose or suggest the claimed features for which it is relied upon. For at least this reason, the Applicants respectfully submit claim 16 is patentably distinct over the cited references and that the rejection should be withdrawn.

In an attempt to arrive at some of the claimed features of claim 16 (i.e., acquirement step and determination step) the Examiner turns to *Yasushi*. *Yasushi* discloses a system and method for printing image data that has been transmitted via a plurality of email attachments. According to *Yasushi*, when an image file has been divided into a plurality of attachments, the data of each file is received, combined, and restored PRIOR to supplying it to the printing process.

In applying *Yasushi*, the Examiner alleges that the reference teaches both the acquirement step and determination step as recited in claim 16. The Examiner equates the

"dividing large data into plurality of data" of *Yasushi* with the acquirement step of the Applicants' claim 16. The Examiner further equates the "combining data of each file" as disclosed by *Yasushi* with the determination step of the Applicants' claim 16. However, similar to *Takashi*, *Yasushi* is entirely silent with respect to firmware having a memory write priority level, to which the Examiner concedes. Although *Yasushi* appears to inherently disclose acquiring information in order for data to be divided and making a determination (i.e., combining data), neither the "acquiring" and subsequent division of data nor the combining of data, as disclosed by *Yasushi* are based on a priority level, as recited in claim 16. The acquirement step, as recited in claim 16 is defined as "acquiring information relating to said priority level of said attached one firmware...." Moreover, the determination step is defined in claim 16 as "determining...based on said acquired information relating to a priority level...." Said another way, the determining step depends upon the outcome of the acquirement step (i.e., acquiring of information relating to priority level). The division of data (or "acquiring" of the data to be divided), as disclosed by *Yasushi*, is in no way related to priority level of firmware. Therefore, *Yasushi* fails to disclose "an acquirement step of acquiring information relating to said priority level", as recited in claim 16. Since *Yasushi* fails to disclose acquiring information relating to priority level, it is evident that *Yasushi* does not and cannot disclose the determination step, as recited in claim 16, as the determination step is based upon the acquired information (acquired in the acquirement step) related to priority level.

The Applicants once again submit that the Examiner, similar to above, is neglecting to consider each claim feature in its entirety. Both the acquirement step and determination step as defined by claim 16 **depend upon priority level**. Because *Yasushi* fails to disclose or suggest priority levels, as acknowledged by the Examiner, *Yasushi* does not and cannot teach an acquirement step and a determination step as recited in claim 16.

The Examiner finally turns to *Albanese* in an attempt to address the above-noted deficiencies by citing the reference for allegedly disclosing "data having priority levels [col. 2, 1.58 - col. 3, 1.6]".

Albanese discloses a system for packetizing encoded data corresponding to priority levels. As taught by *Albanese*, a transmitting data processing system 102 is configured to encode different portions of a data stream such that portions of the data stream denoted as having a higher priority are encoded with a higher level of redundant data than portions of the data stream denoted as having lower priority, in order to prevent loss of the higher priority data in the event of some data loss condition. See, e.g., col. 2, ll. 5-29. Once the data is encoded, it can be transmitted. Once transmitted, a receiving data processing system 106, as disclosed by *Albanese*, is configured to receive and store the encoded data and, ultimately, decode the data.

More specifically, the transmitting data system 102 is configured to divide the encoded data into blocks having assigned priority levels p1, p2, p3. Multiple blocks are loaded into a packet, which has an associated ID. In some embodiments, the packets can be arranged such that highest priority data blocks are positioned first within the packets. Because encoded data is transmitted as a set of data packets, some data packets within a message may take longer than others to arrive at the receiving data processing system 106 and may not arrive in the original order. When the data packets arrive, the IDs allow the receiving station to reassemble the received data packets in their proper order. See, e.g., col. 7, ll. 1-23. Said another way, each packet is received and then reassembled according to its ID with respect to other received packets of the data stream, PRIOR to processing/decoding. Furthermore, a sufficient number of packets must arrive in order to reassemble an entire

message block. In other words, a decoding procedure is not initiated until an entire message block (e.g., a plurality of packets) is reassembled. See, e.g., col. 10, ll.6-10.

Moreover, **the priority levels assigned to the data packets are specifically used for decoding purposes only** (see, e.g., col. 2-3). *Albanese* is entirely silent with respect to any relationship between priority levels of data and writing data to memory. Therefore, the priority levels, as disclosed by *Albanese*, have absolutely no effect on whether the data is written to memory, which is in contrast with claim 16. Claim 16 recites, "...determining whether said attached one firmware attains a write allowable state into a predetermined memory based on said acquired information relating to a priority level. . .and permitting writing of said one firmware into a predetermined memory when it is determined the firmware attached attains a write allowable state by said determination step."

As claimed, only one firmware from the plurality of firmware that is determined to have a write allowable status is required in order to write that one firmware to memory, which is in contrast with the teachings of *Albanese*. *Albanese* specifically teaches that all parts of the divided data must be received and reassembled prior to initiating decoding of the entire data string. As discussed above, although the data is decoded according to assigned priority levels, the data is not also written into memory based on their priority levels.

To better assist in the understanding of the recitations of claim 16, the following example is provided. If a plurality of firmware includes firmware 1, firmware 2, and firmware 3 (i.e., parts 1-3), each firmware (i.e., part) is assigned a memory priority level (1/3, 2/3, and 3/3). Assigning priority levels 1/3, 2/3, 3/3 for each of a plurality of firmware corresponds to the Applicants' claimed "confirming reception ...with one of a plurality of firmware, each firmware having a memory write priority level"). If firmware 1/3, which is of highest priority, as indicated by '1', is received, it is written to memory regardless if firmware

2/3 and 3/3 have been received. However, if firmware 2/3, which is of second highest priority, is received first, it is not written until 1/3 (e.g., highest priority) has been written, but it need not wait for 3/3 (lowest priority). The above description illustrates the Applicants' claimed "acquiring information relating to said priority level" and "determining whether said attached one firmware attains a write allowable state". By determining if one firmware from the plurality attains a write allowable state, the order for writing the divided firmware into memory is maintained without delaying the writing operation by waiting for all parts to be received.

The Applicants respectfully submit that a mere teaching of priority levels in the reference, is not sufficient for supporting a *prima facie* case for rejecting claim 16 under 35 U.S.C. § 103(a), specifically since the functionality of *Albanese* pertaining to the decoding of the data according to priority level is not analogous to that of claim 16.

In conclusion, *Takashi* and *Yasushi* both fail to disclose priority level settings for writing firmware into memory. *Yasushi* inherently discloses acquiring data (dividing data, to which the Examiner refers) and combining data, however, is entirely silent with respect to acquiring data/dividing data relating to priority level and combining data according to the data acquired/divided related to priority level. As acknowledged in the Office Action, both *Takashi* and *Yasushi* are entirely silent with respect to priority levels for writing units of data into memory. Although *Albanese* discloses a system utilizing priority levels, the system's principle of operation is entirely different from that of the Applicants' claim 16. Specifically, the priority levels are used for a distinctly different purpose. Because neither *Takashi* nor *Yasushi* disclose priority levels or a method of operation utilizing priority levels analogous to that defined by claim 16, in order to arrive at the claimed method steps, the principle of operation of *Albanese* with respect to priority levels must be taken into consideration. As

previously discussed; however, *Albanese* clearly does not teach a method of operation utilizing priority levels for writing data into memory that is analogous to that defined by claim 16. The application of priority levels to data in *Albanese* has absolutely no effect on whether the data is written into memory. Rather, the priority levels, as disclosed by *Albanese*, are used in connection with the ***decoding*** of data.

For at least the reasons set forth above, the Applicants respectfully request the rejection be withdrawn.

Notwithstanding the above-noted deficiencies, the premise of *Albanese* is entirely different from the premise of the presently claimed invention. The Applicants' claimed invention pertains to acquiring a firmware from a plurality of firmware, wherein each of the acquired firmware has a priority level and upon receiving one firmware from the plurality, determining if that given firmware from the plurality is in write allowable state. If so, that one firmware from the plurality is written to memory. This is not disclosed or remotely suggested by *Albanese*, and is in fact, in contrast with the teachings of *Albanese*. As such, there is no motivation that would lead one of ordinary skill in the art to modify the teachings of *Takashi* and *Yasushi* with those of *Albanese* in order to arrive at the features of claim 16. Thus, the Examiner has failed to articulate a proper motivation for combining *Albanese* with *Takashi* and *Yasushi*.

Because the rationale, as purported by the Examiner, is inconsistent with/contradicts the *Albanese* reference, it is, therefore, insufficient to support a *prima facie* case of obviousness necessary for a rejection under Section 103(a).

Even if, arguendo, the combination of *Takashi*, *Yasushi*, and *Albanese* could be made, to which the Applicants do not agree, the combination still would not result in the steps as recited in claim 16. As demonstrated above, any possible combination of *Takashi*, *Yasushi*,

and *Albanese* would NOT process and write firmware in the manner recited in the claim. At best, the combination teaches receiving a plurality of data, each with an assigned priority level, and decoding/processing the plurality of data according to priority level once all of the data from the plurality has been received. This is in contrast with claim 16, which recites that one firmware is written into a predetermined memory when the firmware is determined to have a write allowable state, which is based on priority level.

For at least the foregoing reasons, the subject matter of claim 16 is neither disclosed nor otherwise suggested by *Takashi*, *Yasushi*, and *Albanese*, whether considered individually or in any reasonable combination thereof. Accordingly, the Applicants respectfully submit that the subject matter of claim 16 is patentably distinct from the combined teachings of *Takashi*, *Yasushi*, and *Albanese* and request that the rejection be withdrawn.

Independent claims 20, 22, and 23, although having different scope, recite at least some of the same distinguishing features as noted above with respect to claim 16. Therefore, arguments similar to those above in connection with claim 16 are also applicable to claims 20, 22, and 23. Accordingly, the Applicants respectfully submit that claims 20, 22, and 23 are patentably distinct from *Takashi*, *Yasushi*, and *Albanese* and request that the rejections be withdrawn.

Further, claims 17, 18, 21, 24, and 25 depend from independent claims 16, 20, 22, and 23, and therefore include all the subject matter of the corresponding claim from which they depend. Accordingly, claims 17, 18, 21, 24, and 25 are allowable over the applied references for the reasons already set forth above with regard to claims 16, 20, 22, and 23.

Claim 25 is rejected as allegedly being unpatentable over *Takashi*, *Yasushi*, *Albanese* and *Felouzis*.

Claim 25 depends from independent claim 23, and is therefore allowable based at least upon its dependence from an allowable base claim. Accordingly, claims 25 is allowable over the applied reference for at least the reasons already set forth above with regard to claims 23. Thus, the Applicants respectfully request that the rejection be withdrawn.

For at least the reasons stated above, Applicants respectfully submit that all pending claims are allowable.

CONCLUSION

All of the stated grounds of rejection have been properly traversed or rendered moot. The Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. The Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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Date: December 6, 2010

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